

REMARKS

Applicants submit this Reply in response to the non-final Office Action mailed on October 2, 2008. Prior to this Reply, claims 17-32 were pending in this application, of which claim 17 is independent. By this response, Applicants have amended claim 17 and added new independent claim 34 and dependent claims 33 and 35-48. No new matter has been added.

In the Office Action, the Examiner rejected claims 17-32 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. Pub. No. 2003/0025238 ("Ogawa") in view of at least one of U.S. Pat. Pub. No. 2005/0017387 ("Harris"), U.S. Pat. No. 3,782,428 ("Cartwright"), U.S. Pat. No. 1,827,416 ("Birdsall"), and U.S. Pat. No. 3,854,629 ("Blieberger").

In this Reply, Applicants have amended independent claim 17 to recite, among other things:

A process for manufacturing elastomeric components of a tyre for a vehicle wheel, the process comprising: feeding a continuous elongated element from a delivery member by exerting a feeding pressure inside the delivery member [and] exerting a counter-pressure inside the delivery member after stopping the feeding, such that the pressure inside the delivery member drops to between about 10 bars and about 50 bars

Support for this amendment can be found in Applicants' specification at least at page 5, lines 17-27 and page 15, lines 21-31. Additionally, support for Applicants' new independent claim 34 can be found in Applicants' dependent claims 27 and 28.

Applicants respectfully traverse all pending rejections for at least the reasons discussed below.

Rejections Under 35 U.S.C. § 103(a)

The Examiner rejected claims 17-32 under 35 U.S.C. § 103(a) as being unpatentable over Ogawa in view of at least one of Harris, Cartwright, Birdsall, and Blieberger. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See M.P.E.P. § 2142, 8th Ed., Rev. 5 (August 2006). Moreover, "in formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed." USPTO Memorandum from Margaret A. Focarino, Deputy Commissioner for Patent Operations, May 3, 2007, page 2.

A *prima facie* case of obviousness has not been established because, among other things, none of Ogawa, Harris, Cartwright, Birdsall, and Blieberger, alone or in any combination, teach or suggest every feature of Applicants' claims. Specifically, none of the references cited by the Examiner teach or suggest "exerting a counter-pressure inside the delivery member after stopping the feeding, such that the pressure inside the delivery member drops to between about 10 bars and about 50 bars," as recited in amended independent claim 17.

One object of Applicants' invention is to quickly reduce the pressure within the delivery member to about 10-50 bars after completion of material extrusion. As explained in Applicants' specification, waiting for the residual pressure to reach about 10-50 bars ensures a reproducibility of the extruded product between delivery cycles of the feed material. Specifically, the specification states:

When extrusion is over, i.e. when a working cycle has been completed, both the residual pressure value and the relaxation time of such a pressure mainly depend on the viscoelastic properties of the elastomeric material and the geometry of the extrusion ducts. All these possible variables do not ensure a reproducibility of the extruded product and therefore a good repeatability of the delivery cycles, unless a sufficient time has elapsed after stopping of the delivery member, so as to reach an acceptable value of the residual pressure, in the order of 10-50 bars for example. . . . [B]y imposing a predetermined pressure drop within a predetermined and very reduced period of time . . . not only an optimal reproducibility of the features of the extruded product can be achieved, but in addition this reproducibility can be obtained without substantially stopping delivery of the extruded product for a period longer than the time required for positioning a subsequent tyre in the same working station.

Specification at p. 5, l. 17-p. 6, l. 5.

In the Office Action, the Examiner acknowledged that "Ogawa does not . . . describe exerting a counter pressure inside the delivery members after stopping feeding." Office Action at 2. However, the Examiner contends that Harris, Cartwright, Birdsall, and Blieberger each disclose the exertion of a counter-pressure "to effect the feeding of the material after stoppage." Office Action at 3. But, as the Examiner stated, the object of the counter-pressure described in these references is "to allow better control of material discharge at the completion of the desired discharge." Office Action at 3. In other words, the pressure decrease or counter-pressure described in the secondary references need only be sufficient to halt undesirable material discharge after the feeding process has been stopped. For example, Harris describes a process whereby "drool," described as the excess melt exiting the extruder as the gear pump slows or stops, is prevented by a reversal of the gear pump intended to lower the pressure inside the extruder sufficiently to cause a "cessation of the flow of melt."

Harris at [0045]. But nothing in the reference appears to disclose a reversal of the gear pump sufficient to facilitate a pressure drop, or counter-pressure, that brings the pressure inside the extruder down to "between about 10 bars and about 50 bars." Presumably, the reversal of the gear pump in Harris is only sufficient to prevent "drool" and would not drop the residual pressure inside the extruder to a level that would ensure optimal reproducibility of the extruded product in preparation for a subsequent feeding process. Cartwright, Birdsall, and Blieberger share a similar deficiency. Thus, none of the references cited by the Examiner teach or suggest, "exerting a counter-pressure inside the delivery member after stopping the feeding, such that the pressure inside the delivery member drops to between about 10 bars and about 50 bars."

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of amended independent claim 17 under 35 U.S.C. § 103(a) as being unpatentable over Ogawa in view of Harris, Cartwright, Birdsall, or Blieberger.

Moreover, claims 18-32 depend from independent claim 17 and thus, contain all the elements and recitations thereof. As a result, dependent claims 18-32 are allowable at least due to their corresponding dependence from independent claim 17.

Further, with respect to new independent claim 34, Applicants note that no reference cited by the Examiner teaches or suggests "feeding the elongated element restarts after a time gap substantially corresponding to a time required for positioning a subsequent tyre being built close to the delivery member." In the Office Action, the Examiner states "the particular timings/pressures selected during the controlled stoppage of the extrusion would have been readily and routinely optimized by the ordinary artisan through routine optimization." Applicants disagree. As discussed

above, one object of the pressure drop recited in Applicants' claims is to ensure optimal reproducibility of the extruded product in preparation for a subsequent feeding process. That object can be achieved, as stated in Applicants' specification, "by imposing a predetermined pressure drop within a predetermined and very reduced period of time." On the other hand, the purpose of the pressure drop in the secondary references cited by the Examiner is to prevent "drool." Thus, optimizing the time between stopping and starting the extrusion process for the purpose of preventing drool would not lead one of ordinary skill in the art to the claimed invention and the obtained result, i.e. a process optimized for a continuous production of tyres saving time and improving efficiency. Specification at p. 5, l. 32-p. 6, l. 22. As a result, new independent claim 34 and dependent claims 35-48 should be allowed.

Claim Scope

It is to be understood that Applicants are in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification or abstract and or shown in the drawings. Rather, Applicants believe that they are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

If the Examiner believes that a telephone conversation might advance prosecution of this application, the Examiner is cordially invited to call Applicants' undersigned attorney at (404) 653-6435.

Applicants respectfully submit that the Office Action contains a number of assertions concerning the related art and the claims. Regardless of whether those assertions are addressed specifically herein, Applicants respectfully decline to automatically subscribe to them.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

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